

What is claimed is:

1. (amended) A driving mechanism using shape memory alloys comprising:

a module wherein a first and a second shape memory alloy coils connected mutually in series in the axis direction, a drive member, and a fixing member are provided on one common substrate;

a magnetic latch to hold said drive member; and

a drive circuit to supply electricity to said first and the second shape memory alloy coils; said magnetic latch is made of a magnet plate and a plurality of magnetic bodies provided to said drive member;

characterized in that

said drive member is connected to the first and the second shape memory alloys coils and extending in the axis direction,

said magnetic latch is made of a magnet plate and a plurality of magnetic bodies provided to said drive member,

said first and the second shape memory alloy coils are selectively heated by electrical driving by said drive circuit,

said drive member is moved in the axis direction by compressing or extending of the heated first or the second shape memory alloy coils, and

said drive member is fixed and held in the axis direction by magnetically fixed to said magnetic latch.

2. (amended) The driving mechanism using shape memory alloys as set forth in claim 1, characterized in that;

said magnet plate of said magnetic latch is provided with a penetration hole through which said drive member is penetrated without contact, and said magnetic bodies are arranged mutually separated in the axis direction of the drive member, and said magnet plate is magnetized in the axis direction of said drive member.

3. (deleted)

4. A driving mechanism using shape memory alloys comprising:

a plurality of groups of a module with a first and a second shape memory alloys coils mutually connected in series in the axis direction;

a drive member and a fixing member are arranged on one substrate; and

a magnetic latch part to hold said drive member, characterized in that;

said first and second shape memory alloys coils are sequentially connected in series as a natural length part, its extended part, or compressed part of the first shape memory alloys coil, the extended part, or compressed part, and its natural length part of the

6. (amended) The driving mechanism using shape memory alloys as set forth in any one of claims 1 or 4, characterized in that said magnetic latch part comprises one or more magnetic bodies provided to said drive member, and a latch member provided with a plurality of concave parts mutually arranged separately in the axis direction facing the displacement region of said magnetic bodies, and the concave part region of said latch member is magnetized.

7. A display device equipped with a driving mechanism using shape memory alloys comprising:

at least one driving mechanism using shape memory alloys;

a display sheet arranged in parallel to a magnet plate and having a penetration hole through which each drive member penetrates vertically; and

a control part into which data is input, characterized in that;

said driving mechanism is provided with a plurality of groups of a module wherein a first and a second shape memory alloys coils mutually connected in series in the axis direction, a drive member, and a fixing member are arranged on one common substrate, and a magnetic latch part to hold said drive member,

said first and second shape memory alloys coils are sequentially connected in series as a natural length part, its extended part, or compressed part of the first shape memory alloys coil, the extended part, or compressed part, and its natural length part of the second shape memory alloys coil in turn,

the series-connected part of one end of the natural length part and one end of the extended or compressed part of each of said first and second shape memory alloys coils is connected to the drive member via the fixing member arranged in an aperture part provided to said substrate, and said first and second shape memory alloys coils, said drive member, and said fixing member are movably held about in parallel to said substrate without contact to said substrate,

the other end of the natural length part of said first shape memory alloys coil and the other end of the natural length part of said second shape memory alloys coil are respectively connected to a